

# **Encentuate** R Context Management

## **Deployment Guide**

Product version 3.6

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Encentuate® Context Management Deployment Guide version 3.6.2

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## **About This Guide**

Welcome to the Encentuate Context Management Integration Guide.

Use this deployment guide to successfully install, configure, and test the IAM Context Deployment integrated solution in each client workstation.

## **Purpose**

This guide provides procedures to help deploy, install, and test Encentuate IAM Context Deployment for a customer.

## **Audience**

The target users for this deployment guide are highly technical users that can understand how an Encentuate product can be enhanced and customized for a specific customer's use.

## What's in this guide

<u>About IAM with Context Management</u> provides an overview of how IAM integrates with the Context Management system.

<u>Installation</u> contains instructions for successfully installing and uninstalling the IAM with the Context Management integrated solution.

<u>Testing IAM with Context Management</u> includes recommended ways to verify if the integrated solution is working properly after deployment.

## Abbreviations and terminology

Abbreviation/ acronym	Description
AA	Encentuate AccessAgent
CCOW	Clinical Context Object Workgroup
FCC	Fusionfx Context Channel
FCM	Fusionfx Context Manager
HL7	Health Level Seven
IMS	Encentuate IMS Server
SSO	Single Sign-On

Abbreviations used in the Encentuate Context Management Integration Guide

### **Document conventions**

Refer to this section to understand the distinctions of formatted content in this quide.

#### Main interface elements

The following are highlighted in bold text in the guide: dialog boxes, tabs, panels, fields, check boxes, radio buttons, fields, buttons, folder names, policy IDs/names, and keys. Examples are: **OK**, **Options** tab, and **Account Name** field.

#### **Navigation**

All content that helps users navigate around an interface is italicized (for example, Start >> Run >> All Programs)

#### **Cross-references**

Cross-references refer you to other topics in the guide that may provide additional information or reference. Cross-references are highlighted in green and display the referring topic's name (for example, <u>Document conventions</u>).

#### **Hyperlinks**

Hyperlinks refer you to external documents or web pages that may provide additional information or reference. Hyperlinks are highlighted in blue and display the actual location of the external document or web page (for example, <a href="http://www.encentuate.com">http://www.encentuate.com</a>).

ABOUT THIS GUIDE

#### Scripts, commands, and code

Scripts, commands, or codes are those entered within the system itself for configuration or setup purposes, and are usually formatted in a Courier font.

for example,

```
<script language="JavaScript">
<!--
ht_basename = "index.php";
ht_dirbase = "";
ht_dirpath = "/" + ht_dirbase;
//-->
</script>
```

#### **Tips or Hints**



Tips or hints help explain useful information that would help perform certain tasks better.

#### **Warnings**



Warnings highlight critical information that would affect the main functionalities of the system or any data-related issues.

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# About IAM with Context Management

Refer to this chapter to understand how the IAM with Context Management is used by the Health care industry and how its integration with existing solutions can enhance clinical operations.

Refer to the following main topics:

- System overview
- The IAM Context Management solution

## System overview

The Health Level Seven (HL7) Clinical Context Object Workgroup (CCOW) is a vendor-independent standard that allows clinical applications to share information at the point of care.

Using a technique called "context management", CCOW provides the clinician with a unified view of the information held in separate and disparate health care applications referring to the same patient, encounter, or user.

When a clinician signs on to one application within the group of disparate applications residing in the CCOW environment, that same sign-on is simultaneously executed on all other applications within the group. Similarly, when the clinician selects a patient, the same patient is selected in all the applications.

CCOW is rapidly gaining popularity in the health care industry, because it provides clinicians with faster access to patient records across multiple applications.

Carefx is one of the vendors that provide a CCOW-compliant context management tool called Fusionfx Context Manager (FCM). Encentuate integrates its IAM with Context Management to provide sign-on automation to all CCOW and non-CCOW applications. Carefx' CCOW and non-CCOWs Fusionfx Context Channel™ (FCC) provides the 'channel' between Encentuate AccessAgent and the context manager - FCM.

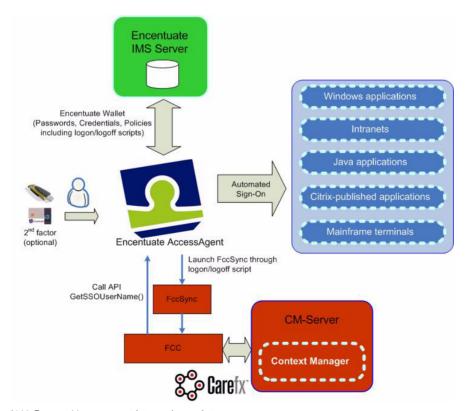
AccessAgent sets the Encentuate user name as context to Carefx FCM after the user logs on to AccessAgent. FCM manages the mapping of individual application logon accounts for the Encentuate user name. FCM automates sign-on to individual CCOW applications using the mapped accounts.

Currently, there is no good authentication mechanism between AccessAgent and FCM. Carefx FCM assumes that user authentication is handled by AccessAgent, before the user context is set to FCM.

## The IAM Context Management solution

Encentuate's IAM with Context Management provides sign-on automation to all CCOW and non-CCOW applications. When combined with an SSO product like Encentuate IAM, Carefx uses a model that allows all user logons to go through the SSO product. When a user logs on, the SSO product executes a Carefx synchronization process "FccSync" that can integrate effectively with FCC. When FCC is alerted about a logon, it calls the SSO product through the SSO's API to obtain the current user's name. FCC then sets the user name into the CCOW context.

The following diagram illustrates the integration points:



IAM Context Management integration points

FCC does not use a command line argument containing the user name, which is not considered secure. Instead, FCC calls into the SSO product to extract the user name.

When a user logs out, the SSO product executes the same Carefx synchronization process (FccSync) to notify FCC that the user has logged out. The FCC then calls the SSO product, which sets a "null" user name to FCC, indicating that no user is currently logged on.

AccessAgent uses the user's logon and logoff scripts to launch the Carefx synchronization process (FccSync). Logon and logoff scripts can be defined per user through AccessAdmin. For an enterprise deployment, the logon and logoff scripts should be included in the policy template so that all users are enabled with Carefx automatically after sign up.

## Installation

Refer to the instructions provided in this chapter to successfully install IAM with Context Management in your computer.

Refer to the following main topics:

- Installing IAM with Context Management
- Uninstalling IAM with Context Management

## Installing IAM with Context Management

Before you install IAM with Context Management, ensure that you meet the following requirements:

- Encentuate AccessAgent 2.3.4.1 or a higher version pre-installed in your computer
- Context Management installer package called integrated\_installer.zip, which can be found on the Encentuate Customer Care site (<a href="http://customercare.encentuate.com">http://customercare.encentuate.com</a>)
- At least an Intel® Pentium® III or equivalent processor
- A minimum of 260MB of RAM



If you have a previous version of IAM with Context Management, uninstall the previous version and delete or rename the folder (e.g., C:\ProgramFiles\CareFX). For more information, see <u>Uninstalling IAM with Context Management</u>.

Once IAM with Context Management is installed on top of AccessAgent, you can upgrade AccessAgent to a later version which will not affect the current installation of IAM with Context Management. In some cases, you may have to manually create an **FccSynchPath** entry in the Encentuate hive.

#### To install IAM with Context Management:

- Download the latest installer of your context management system (e.g., Carefx) from the ftp or download site. If the installer is in a zip file, create a new folder in your hard drive and unzip the compressed file (e.g., <INSTALLDIR>).
- 2 Navigate to the Integrated Installer folder.
- **3** Go to Start >> Run..., and find the path **<INSTALLDIR>\01 FCM Enabler\Setup.exe**. Use all the default values for the installation options.
- Go to Start >> Run..., and find the path <INSTALLDIR>\02 CfxCrypto\Cfx-Crypto.exe. Use all the default values for the installation options.
- **6** Go to Start >> Run..., and find the path <INSTALLDIR>\03 Context Channel\Setup.exe. Use all the default values for the installation options.
- Navigate to the <INSTALLDIR>\04 WTS Session folder and copy its contents to the <PROGDIR>\Carefx\cm-sdk\cm-client folder, where <PROGDIR>\Carefx is the base installation folder for Carefx. The files to be copied must overwrite the existing files of the same name in this folder.
- From the <PROGDIR>\Carefx\cm-sdk\cm-client folder, double-click on the-contextsession.reg file. When prompted, click Yes to add the registry file into the system registry. Click OK to close the dialog box when the addition to the registry has been completed.
- Run MS-DOS prompt (Start >> Programs >> Accessories >> Command Prompt).
  - Enter "cd <PROGDIR>\Carefx\cm-sdk\cm-client\".
  - Register the first COM component by typing the following in the command prompt: "regsvr32 CarefxSessionUtil.dl1".
  - Press Enter. A dialog box is displayed, indicating that the registration of the library file has been completed.
  - Click OK.
  - Register the next COM component by typing the following in the command prompt: "regsvr32 CMWtsUtil.dl1".
  - Press Enter. A dialog box is displayed, indicating that the registration of the library file has been completed.
  - Click OK.
  - Enter "exit" to close the MS-DOS prompt window.

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- Navigate to the <INSTALLDIR>\Properties folder and copy the cmsecurity.properties file to the <PROGDIR>\Carefx\cm-sdk\properties folder. The file to be copied must overwrite the existing file of the same name in this folder.
- Navigate to the <PROGDIR>\Carefx\cm-sdk\Fusionfx\Context Channel\ folder. Right-click on the fcc.ini file, and click Edit. Add the following lines in the [CCOW] section:

userSubjectSuffix=desktop

patientSubjectSuffix=desktop

encounterSubjectSuffix=

After entering these lines, save the file and close the window.

- Navigate to the <INSTALLDIR>\Launcher folder and copy the contents of the entire folder to the <PROGDIR>\Carefx folder.
- © Create a shortcut of <PROGDIR>\Carefx\CM-sdk\cm-server\startcs.cmd and paste the shortcut Start menu >> Programs >> Startup folder so that it runs when Windows starts.
- Restart your computer.

## Uninstalling IAM with Context Management

Refer to the uninstallation procedure to remove the installation of IAM with Context Management in your computer.

Subsequently, you can also uninstall AccessAgent following standard uninstallation procedures.

#### To uninstall IAM with Context Management:

- Use the Windows Control Panel >> Add or Remove Programs to remove the following Carefx-related programs:
  - Carefx Crypto Utility
  - Carefx Fusionfx Context Channel
  - Carefx Fusionfx Context Enabler
- Oo to Start >> Run..., enter regedit, then click OK. Delete the following registry entries:

- HKEY LOCAL MACHINE\Software\Carefx registry entry
- HKEY\_LOCAL\_MACHINE\Software\Encentuate\AccessAgent\Integration\Carefx registry key
- 3 Navigate to <PROGDIR>\Carefx folder, and delete the folder.
- Remove Carefx-related shortcuts from the Start >> All Programs >> Startup menu.
- Solution
  Disable the logon/logoff script policies in the IMS Server for the users for whom Carefx is being set. Remove the VBscript that was added for the user in the logon and logoff script sections related to Carefx. To know which VBscript to remove, see <a href="Iesting IAM with Context Management">Iesting IAM with Context Management</a>.
- 6 Restart your computer.

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## Testing IAM with Context Management

Refer to the content provided in this chapter to verify if IAM with Context Management is functioning as expected, which involves tasks such as performing test logons/ logoffs and successfully launching the executables installed with the system.

Refer to the following main topics:

- Testing IAM with Context Management functionality
- Additional verifications

## Testing IAM with Context Management functionality

The context manager is contacted by the logon script, which will be defined at IMS Server for each Encentuate user. Similarly, when a user logs off AccessAgent, a logoff script is executed by AccessAgent to log the user off from the context manager. The following steps are necessary to test the integrated solution.

#### To test if IAM with Context Management is working properly:

Enable logon/logoff script policies in the IMS Server for the user for whom Carefx is being set, and add the following VBScript for logon and logoff script sections respectively.

```
Logon script:

dim obj

set obj=createobject("wscript.shell")

obj.run("LogonCarefx")

set obj=nothing
```

```
Logoff script:
dim obj
set obj=createobject("wscript.shell")
obj.run("LogoffCarefx")
set obj=nothing
```

2 Log on to AccessAgent as the user for whom logon/logoff script has been defined. The user's Wallet will synchronize the logon/logoff scripts from the IMS Server.



The logon script will not run for the first logon to AccessAgent after the script has been defined on the IMS Server.

**3** For subsequent logons to AccessAgent, the user will automatically log on to the IAM context manager through the logon script.

### Additional verifications

When logging on to AccessAgent (irrespective of the authentication factors), the user should also be automatically logging on to context manager. The same is true for logging off.

When logging on to or logging off from AccessAgent, the user should be automatically logged on to or logged off from all context manager applications.

To verify if a user has logged on to context manager, right-click on the "context channel" system tray grayish-blue icon. A successful logon should display **Status:Linked** and **User: <Encentuate user name>** in the context menu. Once the user logs off from AccessAgent, right-clicking on the icon should display **Status:Unlinked** and **User:** in the context menu.

Launch any of the executables from the <PROGDIR>\Carefx\Launcher directory. The executables should display the same user name logged on to the application. Once the user has logged off AccessAgent, the user should be logged off from these other applications automatically.



Note that the applications provided at <PROGDIR>\Carefx\Launcher folder are meant for demo purposes only.